Journal of Engineering for Gas Turbines and Power

Author Index

All authors of papers published in this volume are listed alphabetically. Full titles are included in each first author's entry. Letters in parentheses follow some of the page numbers: TB indicates Technical Brief, E indicates Errata, and D indicates Discussion.

Aceves, S. — (see Flowers, D.) **123,** 433–439
Agarwal, A. K., and Das, L. M. — Biodiesel Development and Characterization for Use as a Fuel in Compression Ignition Engines. **123,** 440–447
Ahluwalia, R. K., Novick, V. J., Zhang, L., Sutaria, M. P., and Singh, J. P. — Performance of a Vacuum Formed Chopped Ceramic Fiber Filter in a Reducing Environment. **123,** 293–302
Aizawa, Y. — (see Yoshida, Y.) **123,** 543–549
Al-Bedoor, B. O. — Reduced-Order Nonlinear Dynamic Model of Coupled Shaft-Torsional and Blade-Bending Vibrations in Rotors. **123,** 82–88
Alger, T. F. — (see Li, J.) **123,** 659–668
Allen, B. F. — (see Rhode, D. L.) **123,** 604–611
Allocca, L. — (see Bianchi, G. M.) **123,** 419–427
Anand, M. S. — (see James, S.) **123,** 747–756
Anderson, R. W. — (see Li, J.) **123,** 659–668
Andrees, G. — (see Filsinger, D.) **123,** 271–276(TB)
Annigeri, B. S. — (see Winston, H. A.) **123,** 353–358
Archer, N. — (see Wahl, G.) **123,** 520–524
Assanis, D. N., Poola, R. B., Sekar, R., and Cataldi, G. R. — Study of Using Oxygen-Enriched Combustion Air for Locomotive Diesel Engines. **123,** 157–166
Assanis, Dennis N. — (see Filipi, Zoran S.) **123,** 951–959
Aybar, H. S. — (see Beithou, N.) **123,** 693–700
_____ (see Beithou, N.) **123,** 701–706

Babi, U. I. — (see Egorov, I. N.) **123,** 495–501
Basu, P. — (see Cen, K.) **123,** 240–245
Bausa, J., and Tsatsaronis, G. — Dynamic Optimization of Startup and Load-Increasing Processes in Power Plants—Part I: Method. **123,** 246–250
_____, **and Tsatsaronis, G.** — Dynamic Optimization of Startup and Load-Increasing Processes in Power Plants—Part II: Application. **123,** 251–254
Baxter, D. — (see Wahl, G.) **123,** 520–524
Behrendt, T., Carl, M., Fleing, C., Frodermann, M., Heinze, J., Hassa, C., Meier, U., Wolff-Bassmann, D., Hohmann, S., and Zarzalis, N. — Experimental and Numerical Investigation of a Planar Combustor Sector at Realistic Operating Conditions. **123,** 810–816
Beithou, N., and Aybar, H. S. — High-Pressure Steam-Driven Jet Pump—Part I: Mathematical Modeling. **123,** 693–700
_____, **and Aybar, H. S.** — High-Pressure Steam-Driven Jet Pump—Part II: Parametric Analysis. **123,** 701–706
Bek, B. H., and Sorenson, S. C. — A Mixing Based Model for Dimethyl Ether Combustion in Diesel Engines. **123,** 627–632
Bell, S. R. — (see Coppage, G. N.) **123,** 125–131
_____ (see Midkiff, K. C.) **123,** 132–138
Belokin, A. A. — (see Volkov, D. V.) **123,** 774–778
Benjamin, M. — (see Mansour, A.) **123,** 796–802
Bhargava, S. — (see Midkiff, K. C.) **123,** 132–138
Bianchi, G. M., Pelloni, P., Corcione, F. E., Allocca, L., and Luppino, F. — Modeling Atomization of High-Pressure Diesel Sprays. **123,** 419–427
Bladh, R., Castanier, M. P., and Pierre, C. — Component-Mode-Based Reduced Order Modeling Techniques for Mistuned Bladed Disks—Part I: Theoretical Models. **123,** 89–99
_____, **Castanier, M. P., and Pierre, C.** — Component-Mode-Based Reduced Order Modeling Techniques for Mistuned Bladed Disks—Part II: Application. **123,** 100–108
Boccaletti, C., Cerri, G., and Seyedan, B. — A Neural Network Simulator of a Gas Turbine With a Waste Heat Recovery Section. **123,** 371–376
Bohn, D. — (see Krüger, U.) **123,** 557–566
Bohn, D. E., and Lepers, J. — Numerical Simulation of Swirl-Stabilized Premixed Flames With a Turbulent Combustion Model Based on a Systematically Reduced Six-Step Reaction Mechanism. **123,** 832–838
Boyle, N. — (see Wahl, G.) **123,** 520–524
Brasoveanu, D., and Gupta, A. K. — Determination of Propane and Air Maximum Mixing Times. **123,** 226–230
Bray, K. N. C. — (see Zhu, M.) **123,** 779–786
Brookes, S. J., Cant, R. S., Dupere, I. D. J., and Dowling, A. P. — Computational Modeling of Self-Excited Combustion Instabilities. **123,** 322–326
Brown, J. A., Freer, R., and Rowley, A. T. — Reconditioning of Gas Turbine Components by Heat Treatment. **123,** 57–61
Bruening, G. B., Snyder, J. R., and Fredette, R. E. — The Potential Impact of Utilizing Advanced Engine Technology for a Combat Capable Unmanned Air Vehicle (UAV). **123,** 508–512
Brun, K., and Kurz, R. — Measurement Uncertainties Encountered During Gas Turbine Driven Compressor Field Testing. **123,** 62–69
_____ (see Kurz, R.) **123,** 70–77
Brunner, P. — (see Eroglu, A.) **123,** 41–49
Bryzik, W. — (see Schihl, P.) **123,** 644–651
_____ (see Taraza, D.) **123,** 428–432

Cant, R. S. — (see Brookes, S. J.) **123,** 322–326
Carl, M. — (see Behrendt, T.) **123,** 810–816
Carpentieri, E. — (see Waldheim, L.) **123,** 525–536
Casemore, M. A. — (see Stephens, L. S.) **123,** 612–618
Castanier, M. P. — (see Bladh, R.) **123,** 89–99
_____ (see Bladh, R.) **123,** 100–108
Cataldi, G. R. — (see Assanis, D. N.) **123,** 157–166
Caton, J. A. — (see Lee, J. T.) **123,** 204–210
Cen, K., Basu, P., Cheng, L., Fang, M.-X., and Luo, Z.-Y. — Design and Performance Verification of a 62-MWt CFB Boiler. **123,** 240–245
Cernuschi, F. — (see Wahl, G.) **123,** 520–524
Cerri, G. — (see Boccaletti, C.) **123,** 371–376
Chalhoub, N. G. — (see Liu, H.-Q.) **123,** 117–124
Chang, S. W. — Forced Convective Heat Transfer of Parallel-Mode Reciprocating Tube Fitted With a Twisted Tape With Application to Piston Cooling. **123,** 146–156
Chawla, A. — (see Rao, J. S.) **123,** 886–892
Checkel, M. D. — (see Ting, D. S.-K.) **123,** 175–181
Chen, J. J., and Menq, C. H. — Periodic Response of Blades Having Three-Dimensional Nonlinear Shroud Constraints. **123,** 901–909

Journal of Engineering for Gas Turbines and Power

Author Index

All authors of papers published in this volume are listed alphabetically. Full titles are included in each first author's entry. Letters in parentheses follow some of the page numbers: TB indicates Technical Brief, E indicates Errata, and D indicates Discussion.

Aceves, S. — (see Flowers, D.) **123,** 433–439
Agarwal, A. K., and Das, L. M. — Biodiesel Development and Characterization for Use as a Fuel in Compression Ignition Engines. **123,** 440–447
Ahluwalia, R. K., Novick, V. J., Zhang, L., Sutaria, M. P., and Singh, J. P. — Performance of a Vacuum Formed Chopped Ceramic Fiber Filter in a Reducing Environment. **123,** 293–302
Aizawa, Y. — (see Yoshida, Y.) **123,** 543–549
Al-Bedoor, B. O. — Reduced-Order Nonlinear Dynamic Model of Coupled Shaft-Torsional and Blade-Bending Vibrations in Rotors. **123,** 82–88
Alger, T. F. — (see Li, J.) **123,** 659–668
Allen, B. F. — (see Rhode, D. L.) **123,** 604–611
Allocca, L. — (see Bianchi, G. M.) **123,** 419–427
Anand, M. S. — (see James, S.) **123,** 747–756
Anderson, R. W. — (see Li, J.) **123,** 659–668
Andrees, G. — (see Filsinger, D.) **123,** 271–276(TB)
Annigeri, B. S. — (see Winston, H. A.) **123,** 353–358
Archer, N. — (see Wahl, G.) **123,** 520–524
Assanis, D. N., Poola, R. B., Sekar, R., and Cataldi, G. R. — Study of Using Oxygen-Enriched Combustion Air for Locomotive Diesel Engines. **123,** 157–166
Assanis, Dennis N. — (see Filipi, Zoran S.) **123,** 951–959
Aybar, H. S. — (see Beithou, N.) **123,** 693–700
_____ (see Beithou, N.) **123,** 701–706

Babi, U. I. — (see Egorov, I. N.) **123,** 495–501
Basu, P. — (see Cen, K.) **123,** 240–245
Bausa, J., and Tsatsaronis, G. — Dynamic Optimization of Startup and Load-Increasing Processes in Power Plants—Part I: Method. **123,** 246–250
_____, **and Tsatsaronis, G.** — Dynamic Optimization of Startup and Load-Increasing Processes in Power Plants—Part II: Application. **123,** 251–254
Baxter, D. — (see Wahl, G.) **123,** 520–524
Behrendt, T., Carl, M., Fleing, C., Frodermann, M., Heinze, J., Hassa, C., Meier, U., Wolff-Bassmann, D., Hohmann, S., and Zarzalis, N. — Experimental and Numerical Investigation of a Planar Combustor Sector at Realistic Operating Conditions. **123,** 810–816
Beithou, N., and Aybar, H. S. — High-Pressure Steam-Driven Jet Pump—Part I: Mathematical Modeling. **123,** 693–700
_____, **and Aybar, H. S.** — High-Pressure Steam-Driven Jet Pump—Part II: Parametric Analysis. **123,** 701–706
Bek, B. H., and Sorenson, S. C. — A Mixing Based Model for Dimethyl Ether Combustion in Diesel Engines. **123,** 627–632
Bell, S. R. — (see Coppage, G. N.) **123,** 125–131
_____ (see Midkiff, K. C.) **123,** 132–138
Belokin, A. A. — (see Volkov, D. V.) **123,** 774–778
Benjamin, M. — (see Mansour, A.) **123,** 796–802
Bhargava, S. — (see Midkiff, K. C.) **123,** 132–138
Bianchi, G. M., Pelloni, P., Corcione, F. E., Allocca, L., and Luppino, F. — Modeling Atomization of High-Pressure Diesel Sprays. **123,** 419–427
Bladh, R., Castanier, M. P., and Pierre, C. — Component-Mode-Based Reduced Order Modeling Techniques for Mistuned Bladed Disks—Part I: Theoretical Models. **123,** 89–99
_____, **Castanier, M. P., and Pierre, C.** — Component-Mode-Based Reduced Order Modeling Techniques for Mistuned Bladed Disks—Part II: Application. **123,** 100–108
Boccaletti, C., Cerri, G., and Seyedan, B. — A Neural Network Simulator of a Gas Turbine With a Waste Heat Recovery Section. **123,** 371–376
Bohn, D. — (see Krüger, U.) **123,** 557–566
Bohn, D. E., and Lepers, J. — Numerical Simulation of Swirl-Stabilized Premixed Flames With a Turbulent Combustion Model Based on a Systematically Reduced Six-Step Reaction Mechanism. **123,** 832–838
Boyle, N. — (see Wahl, G.) **123,** 520–524
Brasoveanu, D., and Gupta, A. K. — Determination of Propane and Air Maximum Mixing Times. **123,** 226–230
Bray, K. N. C. — (see Zhu, M.) **123,** 779–786
Brookes, S. J., Cant, R. S., Dupere, I. D. J., and Dowling, A. P. — Computational Modeling of Self-Excited Combustion Instabilities. **123,** 322–326
Brown, J. A., Freer, R., and Rowley, A. T. — Reconditioning of Gas Turbine Components by Heat Treatment. **123,** 57–61
Bruening, G. B., Snyder, J. R., and Fredette, R. E. — The Potential Impact of Utilizing Advanced Engine Technology for a Combat Capable Unmanned Air Vehicle (UAV). **123,** 508–512
Brun, K., and Kurz, R. — Measurement Uncertainties Encountered During Gas Turbine Driven Compressor Field Testing. **123,** 62–69
_____ (see Kurz, R.) **123,** 70–77
Brunner, P. — (see Eroglu, A.) **123,** 41–49
Bryzik, W. — (see Schihl, P.) **123,** 644–651
_____ (see Taraza, D.) **123,** 428–432

Cant, R. S. — (see Brookes, S. J.) **123,** 322–326
Carl, M. — (see Behrendt, T.) **123,** 810–816
Carpentieri, E. — (see Waldheim, L.) **123,** 525–536
Casemore, M. A. — (see Stephens, L. S.) **123,** 612–618
Castanier, M. P. — (see Bladh, R.) **123,** 89–99
_____ (see Bladh, R.) **123,** 100–108
Cataldi, G. R. — (see Assanis, D. N.) **123,** 157–166
Caton, J. A. — (see Lee, J. T.) **123,** 204–210
Cen, K., Basu, P., Cheng, L., Fang, M.-X., and Luo, Z.-Y. — Design and Performance Verification of a 62-MWt CFB Boiler. **123,** 240–245
Cernuschi, F. — (see Wahl, G.) **123,** 520–524
Cerri, G. — (see Boccaletti, C.) **123,** 371–376
Chalhoub, N. G. — (see Liu, H.-Q.) **123,** 117–124
Chang, S. W. — Forced Convective Heat Transfer of Parallel-Mode Reciprocating Tube Fitted With a Twisted Tape With Application to Piston Cooling. **123,** 146–156
Chawla, A. — (see Rao, J. S.) **123,** 886–892
Checkel, M. D. — (see Ting, D. S.-K.) **123,** 175–181
Chen, J. J., and Menq, C. H. — Periodic Response of Blades Having Three-Dimensional Nonlinear Shroud Constraints. **123,** 901–909

Chen, J.-Y. — (see Homma, R.) **123,** 303–307
Cheng, L. — (see Cen, K.) **123,** 240–245
Choi, B.-K., and Yang, B.-S. — Multiobjective Optimum Design of Rotor-Bearing Systems With Dynamic Constraints Using Immune-Genetic Algorithm. **123,** 78–81
Choi, S. R., and Gyekenyesi, J. P. — Slow Crack Growth Analysis of Advanced Structural Ceramics Under Combined Loading Conditions: Damage Assessment in Life Prediction Testing. **123,** 277–287
Cioncolini, S. — (see De Lucia, M.) **123,** 333–339
Cohen, J. M., Stufflebeam, J. H., and Proscia, W. — The Effect of Fuel/Air Mixing on Actuation Authority in an Active Combustion Instability Control System. **123,** 537–542
Coppage, G. N., and Bell, S. R. — Use of an Electrically Heated Catalyst to Reduce Cold-Start Emissions in a Bi-Fuel Spark Ignited Engine. **123,** 125–131
Corcione, F. E. — (see Bianchi, G. M.) **123,** 419–427

Dai, W. — (see Li, J.) **123,** 659–668
Danov, S. N., and Gupta, A. K. — Influence of Imperfections in Working Media on Diesel Engine Indicator Process. **123,** 231–239
Darden, J. M., Earhart, E. M., and Flowers, G. T. — Comparison of the Dynamic Characteristics of Smooth Annular Seals and Damping Seals. **123,** 857–863
Das, L. M. — (see Agarwal, A. K.) **123,** 440–447
Daurer, M. — (see Gupta, A. K.) **123,** 619–626
de Lange, H. C. — (see van Essen, H. A.) **123,** 347–352
Delor, J. P. — (see Mignolet, M. P.) **123,** 395–403
_____ (see Rivas-Guerra, A. J.) **123,** 404–411
De Lucia, M., De Sabato, R., Nava, P., and Cioncolini, S. — Temperature Measurements in a Heavy Duty Gas Turbine Using Radiation Thermometry Technique: Error Evaluation. **123,** 333–339
De Sabato, R. — (see De Lucia, M.) **123,** 333–339
de Villiers, E., and Kröger, D. G. — Inlet Losses in Counterflow Wet-Cooling Towers. **123,** 460–464
Diaz, S. E., and San Andrés, L. A. — Air Entrainment Versus Lubricant Vaporization in Squeeze Film Dampers: An Experimental Assessment of Their Fundamental Differences. **123,** 871–877
Dibble, R. — (see Flowers, D.) **123,** 433–439
Döbbeling, K. — (see Eroglu, A.) **123,** 41–49
Donahue, R. J. — (see Ducu, D. O.) **123,** 633–643
Dowling, A. P. — (see Brookes, S. J.) **123,** 322–326
_____ (see) **123,** 766–773
_____ (see Zhu, M.) **123,** 779–786
Dowling, D. R. — (see Hoffman, D. M. W.) **123,** 677–684
_____ (see Hoffman, D. M. W.) **123,** 685–692
Ducu, D. O., Donahue, R. J., and Ghandhi, J. B. — Design of Capacitance Probes for Oil Film Thickness Measurements Between the Piston Ring and Linear in Internal Combustion Engines. **123,** 633–643
Dunbar, W. R. — (see Paulus, D. M., Jr.) **123,** 17–21
Dupere, I. D. J. — (see Brookes, S. J.) **123,** 322–326

Earhart, E. M. — (see Darden, J. M.) **123,** 857–863
Egorov, I. N., Kretinin, G. V., Kostiuk, S. S., Leshchenko, I. A., and Babi, U. I. — The Methodology of Stochastic Optimization of Parameters and Control Laws for the Aircraft Gas-Turbine Engines Flow Passage Components. **123,** 495–501
Eidensten, Lars — (see Maunsbach, Katarina) **123,** 734–740
Elia, M., Ulinski, M., and Metghalchi, M. — Laminar Burning Velocity of Methane–Air–Diluent Mixtures. **123,** 190–196
Elliott, R. — (see Sanliturk, K. Y.) **123,** 930–939
Elliott, R. A. — (see Feitelberg, A. S.) **123,** 757–765
El-Shafei, A. — (see Yakoub, R. Y.) **123,** 839–848
Eroglu, A., Döbbeling, K., Joos, F., and Brunner, P. — Vortex Generators in Lean-Premix Combustion. **123,** 41–49
Ewins, D. J. — (see Sanliturk, K. Y.) **123,** 919–929
_____ (see Sanliturk, K. Y.) **123,** 930–939

Fang, M.-X. — (see Cen, K.) **123,** 240–245
Favrat, D. — (see Pelster, S.) **123,** 717–726
Feitelberg, A. S., Tangirala, V. E., Elliott, R. A., Pavri, R. E., and Schiefer, R. B. — Reduced NO_x Diffusion Flame Combustors for Industrial Gas Turbines. **123,** 757–765
Ferretti, G., and Piroddi, L. — Estimation of NO_x Emissions in Thermal Power Plants Using Neural Networks. **123,** 465–471
Filipi, Zoran S., and Assanis, Dennis N. — A Non-linear, Transient, Single-cylinder Diesel Engine Simulation for Predictions of Instantaneous Engine Speed and Torque. **123,** 951–959
Filsinger, D., Münz, S., Schulz, A., Wittig, S., and Andrees, G. — Experimental Assessment of Fiber-Reinforced Ceramics for Combustor Walls. **123,** 271–276(TB)
Fleing, C. — (see Behrendt, T.) **123,** 810–816
Flohr, P. — (see Krüger, U.) **123,** 557–566
Flores, R. M., Miyasato, M. M., McDonell, V. G., and Samuelsen, G. S. — Response of a Model Gas Turbine Combustor to Variation in Gaseous Fuel Composition. **123,** 824–831
Flowers, D., Aceves, S., Westbrook, C. K., Smith, J. R., and Dibble, R. — Detailed Chemical Kinetic Simulation of Natural Gas HCCI Combustion: Gas Composition Effects and Investigation of Control Strategies. **123,** 433–439
Flowers, G. T., Szász, G., Trent, V. S., and Greene, M. E. — A Study of Integrally Augmented State Feedback Control for an Active Magnetic Bearing Supported Rotor System. **123,** 377–382
_____ (see Darden, J. M.) **123,** 857–863
Fransson, T. H., Hillion, F.-X., and Klein, E. — An International Electronic and Interactive Teaching and Life-Long Learning Platform for Gas Turbine Technology in the 21st Century. **123,** 595–603
Fredette, R. E. — (see Bruening, G. B.) **123,** 508–512
Freer, R. — (see Brown, J. A.) **123,** 57–61
Frodermann, M. — (see Behrendt, T.) **123,** 810–816
Froelund, K., Schramm, J., Tian, T., Wong, V., and Hochgreb, S. — Analysis of the Piston Ring/Liner Oil Film Development During Warm-Up for an SI-Engine. **123,** 109–116
Fujii, S., Kaneko, K., Otani, K., and Tsujikawa, Y. — Mirror Gas Turbines: A Newly Proposed Method of Exhaust Heat Recovery. **123,** 481–486

Gaggioli, R. A. — (see Paulus, D. M., Jr.) **123,** 17–21
Galindo, J. — (see Payri, F.) **123,** 197–203
Gerendas, M., and Wittig, S. — Experimental and Numerical Investigation on the Evaporation of Shear-Driven Multicomponent Liquid Wall Films. **123,** 580–588
Ghandhi, J. B. — (see Ducu, D. O.) **123,** 633–643
Giannozzi, M. — (see Wahl, G.) **123,** 520–524
Ginn, K. B. — (see Yagle, P. J.) **123,** 502–507
Greene, J. S. — (see Sanliturk, K. Y.) **123,** 930–939
Greene, M. E. — (see Flowers, G. T.) **123,** 377–382
Griffin, J. H. — (see Yang, M.-T.) **123,** 893–900
Grondahl, C. M., and Tsuchiya, T. — Performance Benefit Assessment of Ceramic Components in an MS9001FA Gas Turbine. **123,** 513–519
Gupta, A. K., Lewis, M. J., and Daurer, M. — Swirl Effects on Combustion Characteristics of Premixed Flames. **123,** 619–626
_____ (see Brasoveanu, D.) **123,** 226–230
_____ (see Danov, S. N.) **123,** 231–239
Gustafsson, K. M. Bernhard, and Johansson, T. Gunnar — An Experimental Study of Surface Temperature Distribution on Effusion-Cooled Plates. **123,** 308–316
Gyekenyesi, J. P. — (see Choi, S. R.) **123,** 277–287

Hall, M. J. — (see Li, J.) **123,** 659–668
Hamstra, J. W. — (see Yagle, P. J.) **123,** 502–507
Han, Y. M., Seol, W. S., Lee, D. S., Yagodkin, V. I., and Jeung, I. S. — Effects of Fuel Nozzle Displacement on Pre-Filming Airblast Atomization. **123,** 33–40
Hasegawa, T., Sato, M., and Nakata, T. — A Study of Combustion Characteristics of Gasified Coal Fuel. **123,** 22–32
Hassa, C. — (see Behrendt, T.) **123,** 810–816
Heinze, J. — (see Behrendt, T.) **123,** 810–816
Henein, N. — (see Liu, H.-Q.) **123,** 117–124
Henein, N. A. — (see Taraza, D.) **123,** 428–432
Hettel, M. — (see Klose, G.) **123,** 817–823
Hiemstra, W. — (see Rooth, R. A.) **123,** 359–362
Hill, P. G. — (see Miyagawa, K.) **123,** 707–712
Hillion, F.-X. — (see Fransson, T. H.) **123,** 595–603
Ho, H. C. — (see Tsay, D. M.) **123,** 50–56
Hochgreb, S. — (see Froelund, K.) **123,** 109–116
Hoffman, D. M. W., and Dowling, D. R. — Fully Coupled Rigid Internal Combustion Engine Dynamics and Vibration—Part I: Model Development. **123,** 677–684
____, and Dowling, D. R. — Fully Coupled Rigid Internal Combustion Engine Dynamics and Vibration—Part II: Model-Experiment Comparisons. **123,** 685–692
Hoffmann, S. — (see Krüger, U.) **123,** 557–566
Hohmann, S. — (see Behrendt, T.) **123,** 810–816
Holden, J. C. — (see Olsen, D. B.) **123,** 669–676
Homma, R., and Chen, J.-Y. — Reduced Mechanisms for Prediction of NO_2 Formation and Ignition Delay in Methane-Air Combustion. **123,** 303–307
Hong, C.-W., and Tarng, S.-D. — In-Cylinder Tumble Flow Field Measurements and Predictions. **123,** 139–145
Horlock, J. H., Watson, D. T., and Jones, T. V. — Limitations on Gas Turbine Performance Imposed by Large Turbine Cooling Flows. **123,** 487–494
Hsu, T.-C. — (see Lu, P.-J.) **123,** 340–346
Huang, H. — (see Spadaccini, L. J.) **123,** 741–746
Huang, Y. — (see Li, J.) **123,** 659–668
— **123,** 766–773
Hüren, J. — (see Krüger, U.) **123,** 557–566
Hutcherson, G. C. — (see Olsen, D. B.) **123,** 669–676

Isaksson, Anna — (see Maunsbach, Katarina) **123,** 734–740

James, S., Anand, M. S., Razdan, M. K., and Pope, S. B. — In Situ Detailed Chemistry Calculations in Combustor Flow Analyses. **123,** 747–756
Jeung, I. S. — (see Han, Y. M.) **123,** 33–40
Johansson, T. Gunnar — (see Gustafsson, K. M. Bernhard) **123,** 308–316
Johnson, C. — (see Lieuwen, T.) **123,** 182–189
Jones, T. V. — (see Horlock, J. H.) **123,** 487–494
Joos, F. — (see Eroglu, A.) **123,** 41–49
Judge, J., Pierre, C., and Mehmed, O. — Experimental Investigation of Mode Localization and Forced Response Amplitude Magnification for a Mistuned Bladed Disk. **123,** 940–950

Kaneko, K. — (see Fujii, S.) **123,** 481–486
Kaya, H. — (see Yoshida, Y.) **123,** 543–549
Kazakia, J. Y. — (see Yucel, U.) **123,** 255–257
Khodak, E. A., and Romakhova, G. A. — Thermodynamic Analysis of Air-Cooled Gas Turbine Plants. **123,** 265–270
Kim, J. H., Song, T. W., Kim, T. S., and Ro, S. T. — Model Development and Simulation of Transient Behavior of Heavy Duty Gas Turbines. **123,** 589–594
Kim, T. S. — (see Kim, J. H.) **123,** 589–594
Kim, Y. Y. — (see Lee, J. T.) **123,** 204–210
Kinoshita, Y., Oda, T., and Kitajima, J. — Research on a Methane-Fueled Low NO_x Combustor for a Mach 3 Supersonic Transporter Turbojet Engine. **123,** 787–795
Kitajima, J. — (see Kinoshita, Y.) **123,** 787–795
Klein, E. — (see Fransson, T. H.) **123,** 595–603
Klose, G., Schmehl, R., Meier, R., Meier, G., Koch, R., Wittig, S., Hettel, M., Leuckel, W., and Zarzalis, N. — Evaluation of Advanced Two-Phase Flow and Combustion Models for Predicting Low Emission Combustors. **123,** 817–823
Koch, R. — (see Klose, G.) **123,** 817–823
Kostiuk, S. S. — (see Egorov, I. N.) **123,** 495–501
Krebs, W. — (see Krüger, U.) **123,** 557–566
Kretinin, G. V. — (see Egorov, I. N.) **123,** 495–501
Kröger, D. G. — (see de Villiers, E.) **123,** 460–464
Krüger, U., Hüren, J., Hoffmann, S., Krebs, W., Flohr, P., and Bohn, D. — Prediction and Measurement of Thermoacoustic Improvements in Gas Turbines With Annular Combustion Systems. **123,** 557–566
Kurz, R., and Brun, K. — Degradation in Gas Turbine Systems. **123,** 70–77
____ (see Brun, K.) **123,** 62–69
Kwanka, K. — Improving the Stability of Labyrinth Gas Seals. **123,** 383–387

LaBorde, B. H. — (see Mignolet, M. P.) **123,** 388–394
Lara-Curzio, E. — (see Singh, M.) **123,** 288–292
Lazzaretto, A., and Segato, F. — Thermodynamic Optimization of the HAT Cycle Plant Structure—Part I: Optimization of the "Basic Plant Configuration". **123,** 1–7
____, and Segato, F. — Thermodynamic Optimization of the HAT Cycle Plant Structure—Part II: Structure of the Heat Exchanger Network. **123,** 8–16
Lee, C. W. — (see Lee, J. T.) **123,** 204–210
Lee, D. S. — (see Han, Y. M.) **123,** 33–40
Lee, J. T., Kim, Y. Y., Lee, C. W., and Caton, J. A. — An Investigation of a Cause of Backfire and Its Control Due to Crevice Volumes in a Hydrogen Fueled Engine. **123,** 204–210
Leong, M. Y., Smugeresky, C. S., McDonell, V. G., and Samuelsen, G. S. — Rapid Liquid Fuel Mixing for Lean-Burning Combustors: Low-Power Performance. **123,** 574–579
Lepers, J. — (see Bohn, D. E.) **123,** 832–838
Leshchenko, I. A. — (see Egorov, I. N.) **123,** 495–501
Leuckel, W. — (see Klose, G.) **123,** 817–823
Lewis, M. J. — (see Gupta, A. K.) **123,** 619–626
Li, J., Huang, Y., Alger, T. F., Matthews, R. D., Hall, M. J., Stanglmaier, R. H., Roberts, C. E., Dai, W., and Anderson, R. W. — Liquid Fuel Impingement on In-Cylinder Surfaces as a Source of Hydrocarbon Emissions From Direct Injection Gasoline Engines. **123,** 659–668
Lieuwen, T., Torres, H., Johnson, C., and Zinn, B. T. — A Mechanism of Combustion Instability in Lean Premixed Gas Turbine Combustors. **123,** 182–189
Lin, C.-C. — (see Mignolet, M. P.) **123,** 388–394
Liu, H.-Q., Chalhoub, N. G., and Henein, N. — Simulation of a Single Cylinder Diesel Engine Under Cold Start Conditions Using Simulink. **123,** 117–124
Lu, P.-J., Zhang, M.-C., Hsu, T.-C., and Zhang, J. — An Evaluation of Engine Faults Diagnostics Using Artificial Neural Networks. **123,** 340–346
Lundberg, K. — (see Yee, D. Y.) **123,** 550–556
Luo, Z.-Y. — (see Cen, K.) **123,** 240–245
Luppino, F. — (see Bianchi, G. M.) **123,** 419–427
Lyubimov, D. A. — (see Volkov, D. V.) **123,** 774–778

Mansour, A., Benjamin, M., Straub, D. L., and Richards, G. A. — Application of Macrolamination Technology to Lean, Premixed Combustion. **123,** 796–802
Maslen, E., and Montie, D. — Sliding Mode Control of Magnetic Bearings: A Hardware Perspective. **123,** 878–885
_____ (see Montie, D.) **123,** 864–870
Matthews, R. D. — (see Li, J.) **123,** 659–668
Maunsbach, Katarina, Isaksson, Anna, Yan, Jinyue, Svedberg, Gunnar, and Eidensten, Lars — Integration of Advanced Gas Turbines in Pulp and Paper Mills for Increased Power Generation. **123,** 734–740
McDonell, V. G. — (see Flores, R. M.) **123,** 824–831
_____ (see Leong, M. Y.) **123,** 574–579
McGuirk, J. J., and Spencer, A. — Coupled and Uncoupled CFD Prediction of the Characteristics of Jets From Combustor Air Admission Ports. **123,** 327–332
Mehmed, O. — (see Judge, J.) **123,** 940–950
Meier, G. — (see Klose, G.) **123,** 817–823
Meier, R. — (see Klose, G.) **123,** 817–823
Meier, U. — (see Behrendt, T.) **123,** 810–816
Menq, C. H. — (see Chen, J. J.) **123,** 901–909
Metghalchi, M. — (see Elia, M.) **123,** 190–196
Midkiff, K. C., Bell, S. R., Rathnam, S., and Bhargava, S. — Fuel Composition Effects on Emissions From a Spark-Ignited Engine Operated on Simulated Biogases. **123,** 132–138
Mignolet, M. P., Lin, C.-C., and LaBorde, B. H. — A Novel Limit Distribution for the Analysis of Randomly Mistuned Bladed Disks. **123,** 388–394
_____, **Rivas-Guerra, A. J., and Delor, J. P.** — Identification of Mistuning Characteristics of Bladed Disks From Free Response Data—Part I. **123,** 395–403
_____ (see Rivas-Guerra, A. J.) **123,** 404–411
Miller, D. N. — (see Yagle, P. J.) **123,** 502–507
Miyagawa, K., and Hill, P. G. — Rapid and Accurate Calculation of Water and Steam Properties Using the Tabular Taylor Series Expansion Method. **123,** 707–712
Miyasato, M. M. — (see Flores, R. M.) **123,** 824–831
Montie, D., and Maslen, E. — Self-Sensing in Fault Tolerant Magnetic Bearings. **123,** 864–870
_____ (see Maslen, E.) **123,** 878–885
Moore, J. J., and Palazzolo, A. B. — Rotordynamic Force Prediction of Whirling Centrifugal Impeller Shroud Passages Using Computational Fluid Dynamic Techniques. **123,** 910–918
Mori, G., Razore, S., Ubaldi, M., and Zunino, P. — Integrated Experimental and Numerical Approach for Fuel-Air Mixing Prediction in a Heavy-Duty Gas Turbine LP Burner. **123,** 803–809
Münz, S. — (see Filsinger, D.) **123,** 271–276(TB)
Murata, Keiji — (see Nakagaki, Takao) **123,** 727–733

Nakagaki, Takao, Ogawa, Takashi, Murata, Keiji, and Nakata, Yuhji — Development of Methanol Steam Reformer for Chemical Recuperation. **123,** 727–733
Nakata, T. — (see Hasegawa, T.) **123,** 22–32
Nakata, Yuhji — (see Nakagaki, Takao) **123,** 727–733
Nava, P. — (see De Lucia, M.) **123,** 333–339
Nemetz, W. — (see Wahl, G.) **123,** 520–524
Novick, V. J. — (see Ahluwalia, R. K.) **123,** 293–302

Oda, T. — (see Kinoshita, Y.) **123,** 787–795
Ogawa, Takashi — (see Nakagaki, Takao) **123,** 727–733
Olsen, D. B., Holden, J. C., Hutcherson, G. C., and Willson, B. D. — Formaldehyde Characterization Utilizing In-Cylinder Sampling in a Large Bore Natural Gas Engine. **123,** 669–676
Opdyke, Jr., G. — (see Volkov, D. V.) **123,** 774–778
Otani, K. — (see Fujii, S.) **123,** 481–486
Oyakawa, K. — (see Yoshida, Y.) **123,** 543–549

Palazzolo, A. B. — (see Moore, J. J.) **123,** 910–918
Pathak, A. — (see Rao, J. S.) **123,** 886–892
Paulus, D. M., Jr., Gaggioli, R. A., and Dunbar, W. R. — Entropy Production as a Predictive Performance Measure for Turbomachinery. **123,** 17–21
Pavri, R. E. — (see Feitelberg, A. S.) **123,** 757–765
Payri, F., Reyes, E., and Galindo, J. — Analysis and Modeling of the Fluid-Dynamic Effects in Branched Exhaust Junctions of ICE. **123,** 197–203
Pelloni, P. — (see Bianchi, G. M.) **123,** 419–427
Pelster, S., Favrat, D., and von Spakovsky, M. R. — The Thermoeconomic and Environomic Modeling and Optimization of the Synthesis, Design, and Operation of Combined Cycles With Advanced Options. **123,** 717–726
Pierre, C. — (see Bladh, R.) **123,** 89–99
_____ (see Bladh, R.) **123,** 100–108
_____ (see Judge, J.) **123,** 940–950
Piroddi, L. — (see Ferretti, G.) **123,** 465–471
Poola, R. B. — (see Assanis, D. N.) **123,** 157–166
Pope, S. B. — (see James, S.) **123,** 747–756
Priestman, G. H. — (see Wang, J.) **123,** 472–475(TB)
Proscia, W. — (see Cohen, J. M.) **123,** 537–542

Rabuté, R., and Tian, T. — Challenges Involved in Piston Top Ring Designs for Modern SI Engines. **123,** 448–459
Radermacher, R. — (see Schein, C.) **123,** 217–225
Rao, J. S., Pathak, A., and Chawla, A. — Blade Life: A Comparison by Cumulative Damage Theories. **123,** 886–892
Rathnam, S. — (see Midkiff, K. C.) **123,** 132–138
Razdan, M. K. — (see James, S.) **123,** 747–756
Razore, S. — (see Mori, G.) **123,** 803–809
Reitz, R. — (see Tennison, P. J.) **123,** 167–174
Reitz, R. D. — (see Zhu, G.-S.) **123,** 412–418
Reyes, E. — (see Payri, F.) **123,** 197–203
Rhode, D. L., and Allen, B. F. — Measurement and Visualization of Leakage Effects of Rounded Teeth Tips and Rub-Grooves on Stepped Labyrinths. **123,** 604–611
Richards, G. A. — (see Mansour, A.) **123,** 796–802
Rivas-Guerra, A. J., Mignolet, M. P., and Delor, J. P. — Identification of Mistuning Characteristics of Bladed Disks From Free Response Data— Part II. **123,** 404–411
_____ (see Mignolet, M. P.) **123,** 395–403
Ro, S. T. — (see Kim, J. H.) **123,** 589–594
Roberts, C. E. — (see Li, J.) **123,** 659–668
Rókke, N. A., and Wilson, A. J. W. — Experimental and Theoretical Studies of a Novel Venturi Lean Premixed Prevaporized (LPP) Combustor. **123,** 567–573
Romakhova, G. A. — (see Khodak, E. A.) **123,** 265–270
Rooth, R. A., and Hiemstra, W. — A Fiber-Optic Tip-Shroud Deflection Measurement System. **123,** 359–362
Rowley, A. T. — (see Brown, J. A.) **123,** 57–61
Rushworth, S. — (see Wahl, G.) **123,** 520–524

Samuelsen, G. S. — (see Flores, R. M.) **123,** 824–831
_____ (see Leong, M. Y.) **123,** 574–579
San Andrés, L. A. — (see Diaz, S. E.) **123,** 871–877
Sanliturk, K. Y., Ewins, D. J., Elliott, R., and Greene, J. S. — Friction Damper Optimization: Simulation of Rainbow Tests. **123,** 930–939
_____, **Ewins, D. J., and Stanbridge, A. B.** — Underplatform Dampers for Turbine Blades: Theoretical Modeling, Analysis, and Comparison With Experimental Data. **123,** 919–929
Sato, M. — (see Hasegawa, T.) **123,** 22–32
Schein, C., and Radermacher, R. — Scroll Compressor Simulation Model. **123,** 217–225
Schiefer, R. B. — (see Feitelberg, A. S.) **123,** 757–765

Schihl, P., Schwarz, E., and Bryzik, W. — Performance Characteristics of a Low Heat Rejection Direct-Injection Military Diesel Engine Retrofitted With Thermal Barrier Coated Pistons. **123,** 644–651
Schmehl, R. — (see Klose, G.) **123,** 817–823
Schramm, J. — (see Froelund, K.) **123,** 109–116
Schulz, A. — (see Filsinger, D.) **123,** 271–276(TB)
Schwarz, E. — (see Schihl, P.) **123,** 644–651
Segato, F. — (see Lazzaretto, A.) **123,** 1–7
_____ (see Lazzaretto, A.) **123,** 8–16
Sekar, R. — (see Assanis, D. N.) **123,** 157–166
Seol, W. S. — (see Han, Y. M.) **123,** 33–40
Seyedan, B. — (see Boccaletti, C.) **123,** 371–376
Sierens, R., and Verhelst, S. — Experimental Study of a Hydrogen-Fueled Engine. **123,** 211–216
Singh, J. P. — (see Ahluwalia, R. K.) **123,** 293–302
Singh, M., and Lara-Curzio, E. — Design, Fabrication, and Testing of Ceramic Joints for High Temperature SiC/SiC Composites. **123,** 288–292
Smith, J. R. — (see Flowers, D.) **123,** 433–439
Smugeresky, C. S. — (see Leong, M. Y.) **123,** 574–579
Snyder, J. R. — (see Bruening, G. B.) **123,** 508–512
Sobel, D. R. — (see Spadaccini, L. J.) **123,** 741–746
Song, T. W. — (see Kim, J. H.) **123,** 589–594
Sorenson, S. C. — Dimethyl Ether in Diesel Engines: Progress and Perspectives. **123,** 652–658
_____ (see Bek, B. H.) **123,** 627–632
Spadaccini, L. J., Sobel, D. R., and Huang, H. — Deposit Formation and Mitigation in Aircraft Fuels. **123,** 741–746
Spencer, A. — (see McGuirk, J. J.) **123,** 327–332
Stalder, J.-P. — Gas Turbine Compressor Washing State of the Art: Field Experiences. **123,** 363–370
Stanbridge, A. B. — (see Sanliturk, K. Y.) **123,** 919–929
Stanglmaier, R. H. — (see Li, J.) **123,** 659–668
Stephens, L. S., and Casemore, M. A. — Negative Stiffness Coefficients for Magnetic Actuators Using Laplace's Equation. **123,** 612–618
Straub, D. L. — (see Mansour, A.) **123,** 796–802
Stufflebeam, J. H. — (see Cohen, J. M.) **123,** 537–542
Sun, F. — (see Winston, H. A.) **123,** 353–358
Sutaria, M. P. — (see Ahluwalia, R. K.) **123,** 293–302
Svedberg, Gunnar — (see Maunsbach, Katarina) **123,** 734–740
Szász, G. — (see Flowers, G. T.) **123,** 377–382

Tangirala, V. E. — (see Feitelberg, A. S.) **123,** 757–765
Taraza, D., Henein, N. A., and Bryzik, W. — The Frequency Analysis of the Crankshaft's Speed Variation: A Reliable Tool for Diesel Engine Diagnosis. **123,** 428–432
Tarng, S.-D. — (see Hong, C.-W.) **123,** 139–145
Tennison, P. J., and Reitz, R. — An Experimental Investigation of the Effects of Common-Rail Injection System Parameters on Emissions and Performance in a High-Speed Direct-Injection Diesel Engine. **123,** 167–174
Tian, T. — (see Froelund, K.) **123,** 109–116
_____ (see Rabuté, R.) **123,** 448–459
Ting, D. S.-K., and Checkel, M. D. — The Effect of Mean Turbulent Strain Rate on the Flame Speed of Premixed, Growing Flames. **123,** 175–181
Torres, H. — (see Lieuwen, T.) **123,** 182–189
Trent, V. S. — (see Flowers, G. T.) **123,** 377–382
Tsatsaronis, G. — (see Bausa, J.) **123,** 246–250
_____ (see Bausa, J.) **123,** 251–254
Tsay, D. M., Yan, W. F., and Ho, H. C. — Generation of Five-Axis Cutter Paths for Turbomachinery Components. **123,** 50–56
Tsuchiya, T. — (see Grondahl, C. M.) **123,** 513–519
Tsujikawa, Y. — (see Fujii, S.) **123,** 481–486

Ubaldi, M. — (see Mori, G.) **123,** 803–809
Ulinski, M. — (see Elia, M.) **123,** 190–196

Vandervort, C. L. — 9 ppm NO_x/CO Combustion System for "F" Class Industrial Gas Turbines. **123,** 317–321
van Essen, H. A., and de Lange, H. C. — Nonlinear Model Predictive Control Experiments on a Laboratory Gas Turbine Installation. **123,** 347–352
Verhelst, S. — (see Sierens, R.) **123,** 211–216
Volkov, D. V., Belokin, A. A., Lyubimov, D. A., Zakharov, V. M., and Opdyke, Jr., G. — Flamelet Model of NO_x in a Diffusion Flame Combustor. **123,** 774–778
von Spakovsky, M. R. — (see Pelster, S.) **123,** 717–726

Wagner, N. G. — Reliable Rotor Dynamic Design of High-Pressure Compressors Based on Test Rig Data. **123,** 849–856
Wahl, G., Nemetz, W., Giannozzi, M., Rushworth, S., Baxter, D., Archer, N., Cernuschi, F., and Boyle, N. — Chemical Vapor Deposition of TBC: An Alternative Process for Gas Turbine Components. **123,** 520–524
Waldheim, L., and Carpentieri, E. — Update on the Progress of the Brazilian Wood BIG-GT Demonstration Project. **123,** 525–536
Wang, J., Priestman, G. H., and Wu, D. — A Theoretical Model of Uniform Flow Distribution for the Admission of High-Energy Fluids to a Surface Steam Condenser. **123,** 472–475(TB)
Watson, D. T. — (see Horlock, J. H.) **123,** 487–494
Weakley, C. K. — (see Yee, D. Y.) **123,** 550–556
Westbrook, C. K. — (see Flowers, D.) **123,** 433–439
Willson, B. D. — (see Olsen, D. B.) **123,** 669–676
Wilson, A. J. W. — (see Rökke, N. A.) **123,** 567–573
Winston, H. A., Sun, F., and Annigeri, B. S. — Structural Health Monitoring With Piezoelectric Active Sensors. **123,** 353–358
Wittig, S. — (see Filsinger, D.) **123,** 271–276(TB)
_____ (see Gerendas, M.) **123,** 580–588
_____ (see Klose, G.) **123,** 817–823
Wolff-Bassmann, D. — (see Behrendt, T.) **123,** 810–816
Wong, V. — (see Froelund, K.) **123,** 109–116
Wu, D. — (see Wang, J.) **123,** 472–475(TB)

Yagle, P. J., Miller, D. N., Ginn, K. B., and Hamstra, J. W. — Demonstration of Fluidic Throat Skewing for Thrust Vectoring in Structurally Fixed Nozzles. **123,** 502–507
Yagodkin, V. I. — (see Han, Y. M.) **123,** 33–40
Yakoub, R. Y., and El-Shafei, A. — The Nonlinear Response of Multimode Rotors Supported on Squeeze Film Dampers. **123,** 839–848
Yan, Jinyue — (see Maunsbach, Katarina) **123,** 734–740
Yan, W. F. — (see Tsay, D. M.) **123,** 50–56
Yang, B.-S. — (see Choi, B.-K.) **123,** 78–81
Yang, M.-T., and Griffin, J. H. — A Reduced-Order Model of Mistuning Using a Subset of Nominal System Modes. **123,** 893–900
Yee, D. Y., Lundberg, K., and Weakley, C. K. — Field Demonstration of a 1.5 MW Industrial Gas Turbine With a Low Emissions Catalytic Combustion System. **123,** 550–556
Yoshida, Y., Oyakawa, K., Aizawa, Y., and Kaya, H. — A High-Temperature Catalytic Combustor With Starting Burner. **123,** 543–549
Yucel, U., and Kazakia, J. Y. — Analytical Prediction Techniques for Axisymmetric Flow in Gas Labyrinth Seals. **123,** 255–257

Zakharov, V. M. — (see Volkov, D. V.) **123,** 774–778
Zarzalis, N. — (see Behrendt, T.) **123,** 810–816
_____ (see Klose, G.) **123,** 817–823
Zhang, J. — (see Lu, P.-J.) **123,** 340–346

Zhang, L. — (see Ahluwalia, R. K.) **123,** 293–302
Zhang, M.-C. — (see Lu, P.-J.) **123,** 340–346
Zhu, G.-S., and Reitz, R. D. — Engine Fuel Droplet High-Pressure Vaporization Modeling. **123,** 412–418
Zhu, M., Dowling, A. P., and Bray, K. N. C. — Self-Excited Oscillations in Combustors With Spray Atomizers. **123,** 779–786
Zinn, B. T. — (see Lieuwen, T.) **123,** 182–189
Zunino, P. — (see Mori, G.) **123,** 803–809